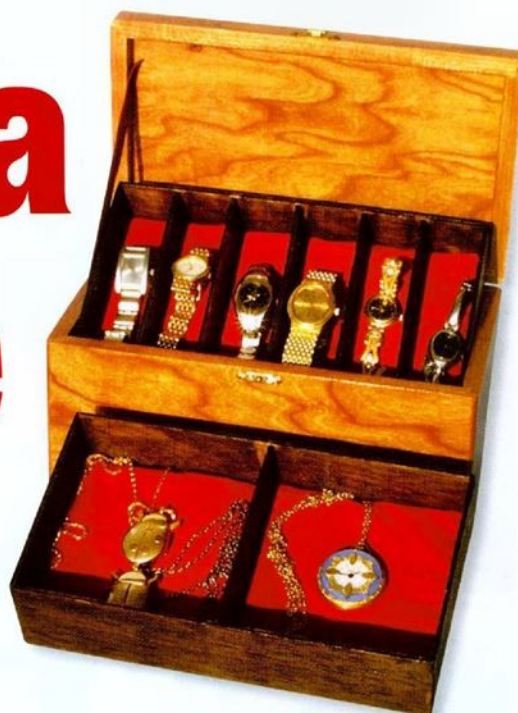
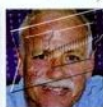


Make a simple box



CUTTING LIST

Qty	L	W
3	240	140
1	240	130
2	140	140



Make a simple box with **Don Phillips** using uncomplicated corner joints and American cherry

On the face of it, making boxes should be quite straightforward. After all, most things you buy come in a box and we've been making them almost since we first learned to use tools.

Making a wooden box however, isn't quite so easy, especially if it's going on display and is intended to hold something precious; boxmaking can then get very complicated as you enter the realms of box comb and dovetail joints. I know quite a few people who, after failing at the first attempt, have never tried again.

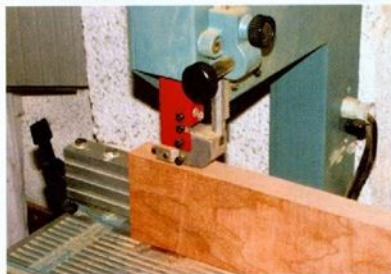
But it doesn't have to be that complicated. Your first box can be made without the need for fancy corner joints, and can still be a thing of some beauty. Not an heirloom perhaps, but certainly an object that'll last a lifetime and be useful and attractive.

Then, when you've built up your confidence with this method you can go back and try those more complicated corner joints.

Choosing timber

The method I used for this box can be adapted for any

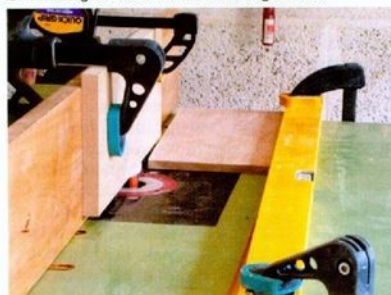
1 Bandsawing the timber in half



2 Gluing the strips together in pairs to gain width



3 Trimming to width with a 1in straight cutter



4 Rebating the shorter ends. Note the push block

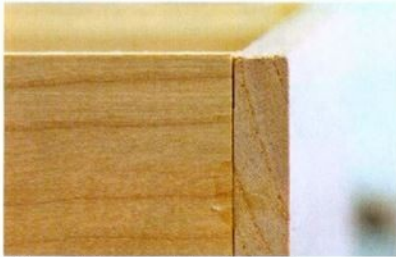




5 All six box components ready for assembly



6 I used framing strap cramps to assemble the box



7 Too much glue can misalign the top edges



8 An extra rebate may be needed to make the lid fit



9 The top glued and cramped in place



10 The sanded box ready for the lid to be cut off



11 Using the router table to cut off the lid



12 The two sections are clamped and trimmed

size of small box. This one was made to hold a collection of watches which, up until now, had been left loose in a drawer.

First you need to choose your timber. I used American cherry as it's attractive, works quite well and freely available. I wanted my material to be no more than 10mm thick. American cherry usually comes as planks just over 1in thick, and to plane this down to 10mm is wasteful and costly, so I cut a

length from the end of the plank and then cut it into strips 55mm wide. Next I squared each strip on two sides and used my small bandsaw to cut it exactly in half, **photo 1**.

I machined these pieces down to 10mm thick and then, in order to get the material back up to the width needed for my box I glued them together again in pairs, **photo 2**.

With material this thin it's impractical and dangerous to

try and use a thicknesser to size it to width. What I do is to cut it to within a couple of millimetres on the table saw and then clamp a straight-edge across my router table and use a 1in straight cutter to trim it to width. This gives an accurate result and a good finish, **photo 3**. Alternatively, you can use a hand plane.

Rebated joints

I don't know the correct name for this joint (double corner rebate?) but it consists

of cutting a rebate all around each piece of the box. Cut the rebate to just over half of the thickness of your material (that is 5.5mm deep) to allow for the glue. Note that I use a purpose-made push stick when rebating the shorter edges, **photos 4**.

The bottom and the sides fit inside the other three pieces. I found the best way to assemble the box was to ensure that the base was on a firm, flat surface and then glue the four sides together with two framing strap cramps which held it all in place while the glue set, **photo 6**. It also pays to use a set-square at this stage to make sure that everything is true.

Evening up

When the glue has dried, you may find that the top edges are very slightly out of line as it's difficult to achieve a uniform film of glue everywhere, **photo 7**.

If this is the case, use the same method of clamping a straight-edge to the router table and using a straight cutter to bring everything into line again. Only take off the minimum you need to level things up and take very small cuts.

If you've had to resort to this method you may now find that your lid will no longer fit snugly down into its recess. In this case you'll need to cut a further small rebate into its underside, **photo 8**. When it fits snugly, glue the top onto the box and clamp it until set, **photo 9**.

Use a small roundover cutter to soften all the edges of the box, and then smooth the surfaces with an orbital sander, progressing down through the grits to 240grit, **photo 10**. That was smooth enough for me as I intend using gloss polyurethane as a finish.

Cutting off the lid

Now you should have a nicely finished box, but at the moment you can't use it until a lid has been separated off. I've seen articles advocating the use of table saws and bandsaws to achieve this. In my view, both these methods are a risk to both the box and



13 The router table set for cutting the hinge recesses

your fingers, especially as the lid finally comes away.

I prefer to use the router table. I use a $\frac{1}{4}$ in cutter and then adjust the fence to produce the depth of lid I want. I then take small cuts of 1mm at a time until the depth of the cut all around the box is 9.5mm, **photo 11**.

Next I use a craft knife to cut through the last half millimetre and separate the two halves. This leaves a slightly rough finish, so I again use the clamp method to trim the two halves, **photo 12**.

Hinging

Fitting the hinge is a vital part of box making. Get it wrong and the two halves don't match. First close your hinge completely and measure it with some callipers. You then need to take half of that measurement from each half of the box. Again, I do this on the router table, **photo 13**.

I measure the length of the hinge and then set up two stops on each side of a 1 in straight cutter. I can then slide the box in down the right stop, then along to the

left stop and slide it out. I do this first with a piece of spare timber cut to the exact length of the box to ensure the hinge recess is exactly in the middle.

Trays

Now the box is finished, you can make trays to hold the contents. I made mine out of 3mm plywood. For the construction of the main tray body I used the same method as for the box itself. The separators were just butt glued into place.

I made sponge inserts covered with material for the watches to sit on. I cut the material to size and then wrapped it around the sponge, glued in place with ordinary wood glue.

Timber tips

Try to cut your timber so that, if possible, you get the same grain pattern around at least the front and sides, as this gives a pleasing continuity.

If you're unsure, try out

your ideas in some cheap pine before committing yourself to a decent hardwood.

Don't worry if it doesn't come out right the first time. None of the wonderful inlaid and priceless boxes you see at woodworking shows are first attempts. The maker's all had to make some mistakes before they achieved commendable results.

